



Deputy Under Secretary of Defense

## Advanced Systems & Concepts

SUCCESS STORY

### USMC Defense Acquisition Challenge (DAC) Integrated Trailer Environmental Control Unit & Generator (ITEG)



The ITEG was approved as an out-of-cycle DAC project in 2006 and meets an urgent Marine Corps requirement for an off-road, HMMWV towable trailer system, to provide power and environmental management for expeditionary facilities in sustained operations.

When operating in the field, Marines need a generator for electrical power, a cooling system for hot climates, and a heating system for cold climates. For prolonged operations in places like Iraq and Afghanistan, they needed at least three systems for command posts, living quarters, and other expeditionary facilities.

The Marines now use a three-in-one system that combines generator, heating and cooling systems, after successful evaluation by the DAC Program. It can generate 20-40 kW of electricity, and provide 96,000 BTU of cooling or heating, between temperatures of -24 and 131 degrees Fahrenheit. The system runs on diesel 1 or 2, JP5 or JP8, and its 19-gallon fuel capacity allows operation for up to eight hours. In addition, the system is on a trailer, which can be towed by a HMMWV or airlifted by a CH-53/CH-47.



Contract award was September 2006, with systems fielded one year later. Captain Greg Wyche with 13th Marine Expeditionary Unit said of the system, "We ran both our ITEGs for the duration of the Native Fury exercise in Jordan and they worked flawlessly ... the cooling capacity was awesome and the power generation was consistent and absolutely reliable. The ITEG's first operational outing was a success."



The program management office estimates that approximately \$2M in R&D costs was avoided by applying a commercial-off-the-shelf solution. The Marine Corps procured 53 units in FY07 and 84 units in FY08 for a total of \$11.45M, with Marine Reserves getting the first systems.

For more information on the DAC program, visit [www.acq.osd.mil/cto](http://www.acq.osd.mil/cto).